

## II. Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

### **Listing of Claims**

1. (Currently Amended) A method for the treatment of atopic dermatitis, psoriatic arthritis or rheumatoid arthritis selectively inhibiting T-cell rolling in a human host, the method comprising administering a compound to a patient in need thereof an immunotherapeutic agent comprising polypeptides from at least one species of *Leishmania* protozoa or nucleic acids which encode for the polypeptides from at least one species of *Leishmania* protozoa, in an effective amount to inhibit T-cell rolling to a patient exhibiting symptoms of atopic dermatitis, psoriatic arthritis or rheumatoid arthritis, at least a portion of which is immunogenic, that interferes with at least one of the following interactions: a CLA and E selectin interaction, a LFA-1/ICAM interaction or a VLA/VCAM interaction.

2-20. Canceled

21. (Currently amended) The method according to claim 1, wherein the ~~immunogenic compound includes an immunotherapeutic agent comprising an insoluble particulate antigen derived from isolated killed cells of amastigotes from at least one species of the *Leishmania* genus, the antigen comprising polypeptides~~ have having apparent molecular weights after total reduction and alkylation of about 73 kDa, about 80 kDa and about 82 kDa.

22. (Currently Amended) The method according to claim 1 21, wherein at least one of the isolated killed cells of amastigotes are derived from species of *Leishmania* protozoa is *Leishmania amazonensis*.

23. (Currently Amended) The method according to claim 1 27, wherein at least one of the isolated killed cells of amastigotes are derived from species of *Leishmania* protozoa is *Leishmania venezuelensis*.

24. (Currently Amended) The method according to claim 1 27, wherein at least one of the isolated killed cells of amastigotes are derived from species of *Leishmania* protozoa is *Leishmania brasiliensis*.

25. (Currently Amended) The method according to claim 1 27, wherein at least one of the isolated killed cells of amastigotes are derived from species of *Leishmania* protozoa is *Leishmania chagasi*.

26. (Currently Amended) The method according to claim 1 27, wherein the species of *Leishmania* protozoa are a combination of isolated killed cells of amastigotes are derived from *Leishmania amazonensis*, *Leishmania venezuelensis*, *Leishmania brasiliensis* and *Leishmania chagasi*.

27. (Withdrawn) The method according to claim 21, wherein the 73 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (b) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14.

28. (Currently Amended) The method according to claim 21, wherein the 73 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 1, SEQ ID NO: 5, and SEQ ID NO: 6.

29. (Withdrawn-Currently Amended) The method according to claim 21, wherein the 73 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14.

30. (Withdrawn) The method according to claim 21, wherein the 80 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 4; or
- (b) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10.

31. (Currently Amended) The method according to claim 21, wherein the 80 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 4.

32. (Withdrawn-Currently Amended) The method according to claim 21, wherein the 80 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10.

33. (Withdrawn) The method according to claim 21, wherein the 82 kDa polypeptide comprises the amino acid sequence set forth as:

- (a) SEQ ID NO: 1 and SEQ ID NO: 2; or
- (b) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

34. (Currently Amended) The method according to claim 21, wherein the 82 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 1 and SEQ ID NO: 2.

35. (Withdrawn-Currently Amended) The method according to claim 21, wherein the 82 kDa polypeptide ~~of the antigen~~ comprises the amino acid sequence set forth as SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

36. (Withdrawn-Currently Amended) The method according to claim 21, wherein ~~the immunotherapeutic agent comprises~~

(a) at least one 73 kDa polypeptide comprises ~~comprising~~ the amino acid sequence set forth as:

- (i) SEQ ID NOS: 1, SEQ ID NO: 5, and SEQ ID NO: 6; or
- (ii) SEQ ID NO: 12, SEQ ID NO: 13, and SEQ ID NO: 14;

(b) at least one 80 kDa polypeptide comprises ~~comprising~~ the amino acid sequence set forth as:

- (i) SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4; or
- (ii) SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10; and

(c) at least one 82 kDa polypeptide comprises ~~comprising~~ the amino acid sequence set forth as:

- (i) SEQ ID NO: 1 and SEQ ID NO: 2; or

(ii) SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

37. (Currently Amended) The method according to claim 21, wherein ~~the comprises immunotherapeutic agent comprises~~

(a) at least one 73 kDa polypeptide, ~~comprising~~ comprises the amino acid sequence set forth as SEQ ID NOS: 1, SEQ ID NO: 5, and SEQ ID NO: 6,

(b) at least one 80 kDa polypeptide, ~~comprising~~ comprises the amino acid sequence set forth as SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4, and

(c) at least one 82 kDa polypeptide, ~~comprising~~ comprises the amino acid sequence set forth as SEQ ID NO: 1 and SEQ ID NO: 2.

38. (Withdrawn-Currently Amended) The method according to claim 21, wherein ~~the immunotherapeutic agent comprises~~

(a) at least one 73 kDa polypeptide, ~~comprising~~ comprises the amino acid sequence set forth as SEQ ID NO: 12, SEQ ID NO: 13 and SEQ ID NO: 14;

(b) at least one 80 kDa polypeptide, ~~comprising~~ comprises the amino acid sequence set forth as SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 10; and

(c) at least one 82 kDa polypeptide ~~of the antigen comprising~~ comprises the amino acid sequence set forth as SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 9.

39. (Canceled)